

**WHAT IS CLAIMED IS:**

1. A system of distributing watch information contents concerning a variety of clocks, and processing information, said system comprising:

an information distribution apparatus that distribute watch information contents concerning said a variety of prepared clocks as data to an information user's hand held terminal device; and

a plurality of hand held terminal devices that acquires and processes watch information contents distributed as data by means of the information distribution apparatus, wherein a software watch is displayed as a video image based on the watch information contents by the hand held terminal device to clock a time.

2. The watch information content distribution processing system as claimed in claim 1, wherein the information distribution apparatus comprises:

a data insert section that constructs the watch information contents in a group of data rows, thereby inserting the contents into a carrier signal; and

a transmission section that transmits the carrier signal whose data rows are constructed and inserted by the data insert section to the information user's hand held terminal device.

3. The watch information content distribution processing system as claimed in claim 1, wherein the watch information contents are distributed as data to the hand held terminal device by using existing broadcast

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infrastructure and/or communication infrastructure.

4. The watch information content distribution processing system as claimed in claim 1, wherein the watch information contents contain at least video image information on a clock character board and time display software.

5. The watch information content distribution processing system as claimed in claim 1, wherein the hand held terminal device comprises:

an operating section operated to input operational information concerning the watch information contents;

a receiving section that receives the watch information contents;

a storage device that stores the watch information contents received by the receiving section; and

a control unit that reads out the watch information contents from the storage device according to the operational information caused by the operating section, and information processing the watch information contents, thereby displaying and controlling a video image.

6. The watch information content distribution processing system as claimed in claim 1, wherein the hand held terminal device is a hand held telephone set that comprises:

a tuner that receives watch information contents from a broadcast station;

a storage device that stores electronic information contents

received by the tuner;

a data processing section that reads out and processes the electronic information contents stored in the storage device; and  
a hand held telephone function controlled by the data processing section.

7. The watch information content distribution processing system as claimed in claim 1, wherein an information provider records the watch information contents in an information recording medium, and provides the contents to an information user, and wherein the information user mounts the information recording medium on the hand held terminal device, and use the medium.

8. The watch information content distribution processing system as claimed in claim 1, wherein the watch information contents are associated with time information managed by the hand held terminal device.

9. The watch information content distribution processing system as claimed in claim 1, wherein time information that is a reference from the information provider to the information user's hand held terminal device is distributed as data, so that the information user corrects watch information managed by the hand held terminal device based on time information defined as a reference.

10. The watch information content distribution processing system as

claimed in claim 9, wherein, in distribution of the time information, associated additional information that is arbitrary advertisement information or that are watch information contents to be distributed as data or to be on sale is distributed at the same time so that the associated additional information is displayed at a portion of a time screen managed by the hand held terminal device.

11. The watch information content distribution processing system as claimed in claim 1, wherein the watch information contents are distributed by a regular or irregular period from an information provider to the information user's hand held terminal device by using the broadcast infrastructure so that a design on the clock screen according to the software watch in the hand held terminal device is automatically updated by the regular or irregular period.

12. The watch information content distribution processing system as claimed in claim 1, wherein a character board background video image adapted to the season and the time interval is automatically displayed by watch information incorporated in the hand held terminal device.

13. The watch information content distribution processing system as claimed in claim 1, wherein the hand held terminal device of foldable type is prepared, and an opening angle of the hand held terminal device having displayed thereon a clock screen according to the software watch is arbitrarily adjusted so as to be used as a placement clock.

14. The watch information content distribution processing system as claimed in claim 1, wherein short-distance wireless communication is made between the two hand held terminals so as to obtain time synchronization.

15. An information distribution apparatus for distributing watch information contents concerning a variety of clocks as data to an information user, said apparatus comprising:

a data insert section that constructs the watch information contents in a group of data rows, thereby inserting the contents into a carrier signal; and

a transmission section that transmits a carrier signal in which the data rows are constructed and inserted by the data insert section to the information user's hand held terminal device.

16. The information distribution device as claimed in claim 15, wherein the data rows are distributed by using the existing broadcast infrastructure and communication infrastructure.

17. The information distribution device as claimed in claim 16, wherein the data rows are transmitted multiply in a vertical blanking period of a television broadcast signal employed by the broadcast infrastructure.

18. A hand held terminal device for acquiring and processing watch information contents concerning a variety of clocks, wherein the watch

information contents are received and stored, the watch information contents are read out in asynchronous manner according to the information user's information operation, and a software watch is displayed as a video image based on at least the watch information contents.

**19.** The hand held terminal device as claimed in claim 18, wherein clock screen information configuring a plurality of the software watches is stored.

**20.** The hand held terminal device as claimed in claim 18, comprising:

- an operating section operated to input operational information concerning said watch information contents;
- a receiving section that receives said watch information contents;
- a storage device that stores the watch information contents received by said receiving section; and
- a control unit that reads out the watch information contents from the storage device according to the operational information caused by the operating section, and information processing the watch information contents, thereby displaying and controlling a video image.

**21.** The hand held terminal device as claimed in claim 20, wherein the control unit displays and controls a video image concerning the software watch that consists of a three-dimensional video image having the watch

information contents processed therein.

22. The hand held terminal device as claimed in claim 20, wherein a communication modem is connected to the control unit so as to receive the watch information contents distributed by using the existing communication infrastructure.

23. The hand held terminal device as claimed in claim 18, wherein the hand held terminal device is a hand held telephone set that comprises:

a tuner that receives the watch information contents from a broadcast station;

a storage device that stores the watch information contents received by the tuner;

a data processing section that reads out and processes the watch information contents stored in the storage device; and

a hand held telephone function controlled by the data processing section.

24. The hand held terminal device as claimed in claim 18, wherein, in the case an information recording medium having the watch information contents recorded therein in advance is provided to the information user, the information user mounts the information recording medium, and uses the watch information contents.

25. An information recording medium, wherein watch information

contents containing video image information on plural types of clock character boards and time display software and a software watch based on the watch information contents are displayed as a video image, and a control procedures for clocking a time is described.

**26.** An information processing method for electronically processing watch information contents concerning a variety of clocks, wherein an information provider prepares watch information contents concerning the variety of clocks, and distributes the watch information contents as data to an information user's hand held terminal device so that the information user displays a software watch as a video image based on the watch information contents distributed as data, and clocks a time by means of the software watch.

**27.** The information processing method as claimed in claim 26, wherein the information user acquires the watch information contents distributed as data, and creates a software watch based the acquired watch information contents.

**28.** The information processing method as claimed in claim 26, wherein the watch information contents are distributed to the hand held terminal device by using the existing broadcast infrastructure and/or communication infrastructure.

**29.** The information processing method as claimed in claim 26, wherein

the watch information contents are recorded in an information recording medium, and is provided to an information user, and wherein the information user mounts the information recording medium to the hand held terminal device, and uses the medium.

30. The information processing method as claimed in claim 29, wherein the information recording medium is provided by using the existing sales infrastructure.

31. The information processing method as claimed in claim 26, wherein the watch information contents are associated with the time information already managed by the hand held terminal device.

32. The information processing method as claimed in claim 26, wherein time information that is a reference from the information provider to the information user's hand held terminal device is distributed as data so that the information user corrects the watch information managed by the hand held terminal device based on the time information defined as a reference.

33. The information processing method as claimed in claim 32, wherein, in distributing the time information, associated additional information that is arbitrary advertisement information and that are watch information contents to be distributed as data or to be on sales is distributed at the same time so as to display the associated additional information at one portion of a clock screen managed by the hand held terminal device.

34. The information processing method as claimed in claim 26, wherein clock screen information configuring a plurality of software watches is stored in the hand held terminal device so that the clock screen information is selected to display an arbitrary software watch as a video image and to clock a time.

35. The information processing method as claimed in claim 26, wherein the watch information contents are distributed by a regular or irregular period from an information provider to the information user's hand held terminal device by using the broadcast infrastructure so that a design on the clock screen according to the software watch in the hand held terminal device is automatically updated by the regular or irregular period.

36. The information processing method as claimed in claim 26, wherein a character board background video image adapted to the season and the time interval is automatically displayed by watch information incorporated in the hand held terminal device.

37. The information processing method as claimed in claim 26, wherein the hand held terminal device of foldable type is prepared, and an opening angle of the hand held terminal device having displayed thereon a time screen according to the software watch is arbitrarily adjusted so as to be used as a placement clock.

38. The information processing method as claimed in claim 26, wherein short-distance wireless communication is made between the two hand held terminals so as to obtain time synchronization.

39. A watch information content distribution processing system for distributing current time information concerning a software watch, thereby processing information, said watch information content distribution processing system comprising:

an information distribution system that manages the current time information and distributes at least correction startup information and the current time information as data according to an information user's request; and

a hand held terminal device with a communication function that triggers the correction startup information distributed as data from the information distribution system to startup a time correction program, and corrects a time of the software watch based on the current time information.

40. The watch information content distribution processing system as claimed in claim 39, wherein the information distribution system distributes correction startup information, current time information, and time correction program to the hand held terminal device.

41. The watch information content distribution processing system as claimed in claim 39, wherein the information distribution system

distributes correction startup information and current time information to the hand held terminal device.

42. The watch information content distribution processing system as claimed in claim 39, wherein, in distributing the current time information, associated additional information that is arbitrary advertisement information and that are watch information contents to be distributed as data or to be on sale is distributed at the same time so that the associated additional information is displayed at one portion of a clock screen managed by the hand held terminal device.

43. The watch information content distribution processing system as claimed in claim 39, wherein, when an operation for indicating a time to be corrected at an arbitrary timing is defined as a manual time correction mode and an operation for automatically correcting a time under a preset correction condition is defined as an automatic time correction mode with respect to correction of a time of a software watch in the hand held terminal device, the manual time correction mode or automatic time correction mode is set to the hand held terminal device.

44. The watch information content distribution processing system as claimed in claim 39, wherein the automatic time correction mode contains at least an intermittent automatic time correction mode for correcting a time in units of time, date, day of the week, month, or years.

**45.** An information distribution system for distributing at least correction startup information and current time information as data according to an information user's request, said system comprising:

a time correcting / managing device that manages the current time information; and

wireless communication means for receiving the information user's request, and distributing the correction startup information and current time information outputted from the time correcting / managing device according to the request as data to the information user's hand held terminal device.

**46.** The information distribution system as claimed in claim 45, wherein the time correcting / managing device distributes a time correction program as well as the correction startup information and current time information to the hand held terminal device.

**47.** The information distribution system as claimed in claim 45, wherein the time correcting/ managing device distributes associated additional information that is arbitrary advertisement information or that are watch information contents to be distributed as data or to be on sale to the hand held terminal device at the same time in distributing the correction startup information and current time information.

**48.** A hand held terminal device with a communication function that acquires and processes watch information contents concerning a software

watch, wherein a communication request is made for a specific communication provider, the correction startup information and current time information are received from the communication provider, the correction startup information is triggered to start a time correction program, and a time of the software watch is corrected based on the current time information

49. The hand held terminal device as claimed in claim 48, wherein clock screen information configuring a plurality of the software watches is stored.

50. The hand held terminal device as claimed in claim 48, comprising:

an operating section operated to input operational information concerning the time correction;

a receiving section that receives the correction startup information and the current time information;

a control unit that triggers the correction startup information received by the receiving section to startup a time correction program, and that corrects a time of the software watch based on the current time information.

51. The hand held terminal device as claimed in claim 48, wherein, when an operation for indicating a time to be corrected at an arbitrary timing is defined as a manual time correction mode and an operation for automatically correcting a time under a preset correction condition is

defined as an automatic time correction mode with respect to correction of a time of a software watch, the manual time correction mode or automatic time correction mode is set to the control unit.

52. The hand held terminal device as claimed in claim 51, wherein the automatic time correction mode contains at least an intermittent automatic time correction mode for correcting a time in units of time, date, day of the week, month, or years.

53. The hand held terminal device as claimed in claim 48, wherein the control unit displays and controls a video image concerning a software watch that consists of a three-dimensional video image having the watch information contents processed.

54. The hand held terminal device as claimed in claim 48, wherein a communication modem is connected to the control unit so as to receive the watch information contents to be distributed by using the existing communication infrastructure.

55. The hand held terminal device as claimed in claim 48, wherein, in the case where an information recording medium having the watch information contents recorded therein in advance is provided to an information user, the information user mounts the information recording medium, and uses watch information contents.

56. A method for information processing current time information concerning a software watch, said method comprising:

an information provider managing the current time information and distributing at least correction startup information and the current time information as data according to an information user's request; and

an information user triggering the correction startup information distributed as data from the information distribution system to startup a time correction program, and correcting a time of the software watch based on the current time information.

57. The information processing method as claimed in claim 56, wherein correction startup information, current time information, and time correction program are distributed to the hand held terminal device.

58. The information processing method as claimed in claim 56, wherein correction startup information and current time information are distributed to the hand held terminal device.

59. The information processing method as claimed in claim 56, wherein, in distribution of the current time information, associated additional information that is arbitrary advertisement information or that are watch information contents to be distributed as data or to be on sale is distributed at the same time so that the associated additional information is displayed at a portion of a clock screen managed by the hand held terminal device.

60. The information processing method as claimed in claim 56, wherein, when an operation for indicating a time to be corrected at an arbitrary timing is defined as a manual time correction mode and an operation for automatically correcting a time under a preset correction condition is defined as an automatic time correction mode with respect to correction of a time of a software watch in the hand held terminal device, the manual time correction mode or automatic time correction mode is set to the hand held terminal device.

61. The information processing method as claimed in claim 60, wherein the automatic time correction mode contains at least an intermittent automatic time correction mode for correcting a time in units of time, date, day of the week, month, or years.